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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,732	08/27/2001	Yoshiaki Kotani	010963	2753

23850 7590 07/31/2002

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EXAMINER

CUEVAS, PEDRO J

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/938,732

Applicant(s)

KOTANI ET AL.

Examiner

Pedro J. Cuevas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Specification*

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Automatic Fault Detection Engine Generator Apparatus And Cogeneration System.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,063,901 to Kaneyasu et al.

Kaneyasu et al. clearly teaches the construction of an engine generator apparatus for interconnecting an output of a generator driven by an engine with a power system, comprising:

an oxygen density sensor (5) provided on the engine for controlling the air-fuel ratio based on its output;

a fault detecting means (6) for detecting a fault in the interconnection with the power system; and

a means (1) for:

interconnecting the output of the power generator with the power system, when the oxygen density sensor becomes its activated state;

canceling the interconnection with the power system when the fault detecting means detects a fault, and resuming the interconnection with the power system when the fault is removed; and

stopping the engine when the interconnection is canceled for a predetermined length of time due to the fault detection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent No. 5,063,901 to Kaneyasu et al. in view of U.S. Patent No. 4,873,840 to Gilliusson.

Gilliusson disclose the construction of a co-generation system having an engine.

However, it fails to disclose an engine generator apparatus as disclosed above.

Kaneyasu et al. teach the construction of an engine generator apparatus for the purpose of providing a diagnosis system and an optimum control unit for an internal combustion engine.

It would have been obvious to one skilled in the art at the time the invention was made to use the an engine generator apparatus disclosed by Kaneyasu et al. on the co-generation system disclosed by Gilliusson for the purpose of providing a diagnosis system and an optimum control unit for an internal combustion engine.

8. With regards to claim 3, Gilliusson disclose a waste heat utilizing unit comprising:

a hot-water tank for storing a first hot water heated with the waste heat released from the engine generator apparatus;

a first heat exchanger (12) installed in the hot-water tank for generating the first hot water;

a second heat exchanger (heating system) positioned above the first heat exchanger in the hot-water tank for heating the first hot water to a second hot water hotter than the first hot water using the heat of the first hot water;

a temperature sensor provided in proximity between the upper end of the first heat exchanger and the lower end of the second heat exchanger; and

a controller (96, 98 and 100) arranged responsive to an output of the temperature sensor for generating and supplying the heat request to the engine generator apparatus as shown in Figures 1-6.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas  
July 28, 2002

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800